

that cooperate with the cutting blades 13 of the cutting cylinder 3 for cutting the ribbon 1 into signatures. Grippers 7 are provided on gripper shafts 14 and along the periphery of the transfer cylinder 4 for holding the signatures. Instead of using grippers as holding devices it is also possible to use pins or any other holding devices that are suitable for holding a leading edge. The transfer cylinder 4 also has adjustable diameter portions provided along its periphery. Each adjustable diameter portion is able to adjust the size of a portion of the transfer cylinder 4. Thus the effective diameter of the transfer cylinder 4 and the cutting cylinder 3 are adjustable to produce signatures of variable length. The adjustable diameter portions can for example be embodied as adjustable rollers 9. As is indicated by the arrows in the adjustable rollers 9, each adjustable roller 9 can be adjusted by a jack 15 such as an eccentric jack or a linear jack, or by any other suitable adjusting device. Fig. 1 illustrates how the size of adjustable portions of the transfer cylinder can be adjusted by retracting and extending the adjustable rollers 9, in other words by moving the adjustable rollers 9 toward and away from the central axis 12 of the transfer cylinder 4 for decreasing and increasing the size of the adjustable portions of the transfer cylinder 4. --

Replace the paragraph between page 13, line 25 and page 14, line 24 with the following: -- Fig. 3 is a diagrammatic side

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view of a second embodiment of a variable length cutoff folder adjusted for a reduced signature length. Equivalent elements of the different embodiments are indicated with identical reference numerals. Fig. 3 shows a cutting cylinder 3 that can be moved toward and away from the transfer cylinder 4. The transfer cylinder 4 has cutting ledges 11 and holding devices 7 such grippers or pins provided along the peripheral region of the transfer cylinder 4. The grippers 7 are mounted on gripper shafts 14. The grippers 7 together with the cutting ledges 11 can be moved toward and away from the central axis 12 of the transfer cylinder 4 in order to adjust the effective diameter of a portion of the transfer cylinder 4. Fig. 3 illustrates the position of the cutting ledge 11 and the gripper 7 in a retracted position for signatures having a reduced length. The cutting cylinder 3 is moved toward the transfer cylinder 4 so that the blades 13 of the cutting cylinder 3 contact the cutting ledges 11 during a cutting operation. If an increased signature length is desired, the cutting ledges 11 together with the grippers 7 are moved outward and away from the central axis 12 of the transfer cylinder 4, thus increasing the effective diameter of portions of the transfer cylinder 4. Fig. 4 illustrates the expanded position of the grippers (holding devices) 7' and the cutting ledges 11' for an increased signature length. The cutting cylinder 3 is moved away from the transfer cylinder 4' in order to cooperate with the cutting ledges 11'. --

Replace the paragraph between page 15, line 1 and page 15,
line 16 with the following: -- Fig. 5 is a cross-sectional
view of the variable length cutoff folder shown in Fig. 3.

Fig. 5 also illustrates a position of the cutting ledges 11'
and the grippers 7' in a retracted position for signatures
having a reduced length. In other words the cutting ledges
11' and the grippers (holding devices) 7' have been moved in a
direction toward the central axis 12 of the transfer cylinder
4'. The cutting cylinder 3 has been moved toward the transfer
cylinder 4' so that the blades 13 of the cutting cylinder 3
contact the cutting ledges 11' during a cutting operation.

Fig. 5 illustrates in an exemplary manner the dimensions of
the transfer cylinder 4'. The diameter of the transfer
cylinder 4' is 1000 mm. The length of the ribbon 1, from the
cutting ledge 11' to the next following tucking blade 6 is
299.47 mm, which is the sum of the straight line having a
length of 258.11 mm and the curved line having a length of
41.36 mm as shown in Fig. 5. --

Replace the paragraph between page 15, line 18 and page 19,
line 3 with the following: -- Fig. 6 is a cross-sectional
view of the variable length cutoff folder shown in Fig. 4.

The cutting ledges 11' and the grippers 7' are in an expanded
position for signatures having an increased length. The
cutting cylinder 3 has been moved away from the transfer